



Minnesota Transportation Museum

MINNEGAZETTE

July/August 1985

Summertime

Summer is for enjoying the fruits of our labors. On an evening hike through the Lake Harriet Glen, the smell of grilling hamburger and leaves fills the air. A band is playing show tunes and Souza marches, as an albino squirrel goes about its business. Kids of all ages line up for a streetcar ride, for some the third this week, exclaiming "Here it comes, dad!" or "Look at that gorgeous wood floor!" The wire sings, a faint whiff of ozone evokes fleeting memories, and distant toot reports a northbound car at Berry Bridge. It's summertime at Lake Harriet and all's right with the world, at least for tonight.

Perched on the bank of Rice Creek, camera poised to grab two fantastic pictures, one listens for an approaching train. Four boys explore the trestle for the most heroic view of what is about to pass. A kid in a motorboat tries to hold it against the current for a view of the action.

Without warning, NP 328 is in the range finder, drifting fast downgrade. Both shots are snapped exactly as planned. In a moment she is hammering upgrade and telling the world about it. The guy with the out of state Corvette and the video camera obviously got what he came for. So did the boys under the bridge. Back at Stockyard Days, engineer **Bob Ball** allows as how he got what he came for, too.

Watch the wonderment on peoples' faces when they learn that the trolley car they are riding has lulled travelers for 76 summers, or that the iron horse up front was burning up the ballast before grandpa was born. Yes, it's summertime, a time for rediscovery and wonderment.



Train riders at New Brighton.

Next Membership Meeting

The next MTM General Membership Meeting will be held on **July 23, 1985, at 7:30 p.m.** at Northwestern National Life, Washington & Nicollet Avenues, downtown Minneapolis.

Minnegazette Deadline

Please send stories and photos for the September/October **Minnegazette** to the Editor by August 7, 1985.

About The Cover

Why would the **Minnegazette** carry a picture of a New Jersey Transit subway car on its cover? The place is the Franklin Avenue loop in Newark, and the date is August 24, 1984. The car was built as Twin City Rapid Transit No 361 by the St Louis Car Company. After six years service on **University Avenue, Como-Harriet, St Clair-Pheasant, and 2nd Street Northeast**, TCRT shipped her out in the winter of 1953. Now as NJT No. 22, 38 years young, and with no prospect of retirement, she is doing just fine thanks. **Duncan Moffitt** reports on the Newark City Subway in this issue.

Duncan Moffitt Photo.

Calendar Of Events

The Museum excursion schedule is subject to changes. Reservation flyers will be mailed with the **Minnegazette** or separately. Watch this column.

- July 23:** General membership meeting, Northwestern National Life, Minneapolis.
- July 27:** Anderson Company Picnic, Bayport.
- July 28:** Excursions on MTM's Stillwater line and return to St Paul.
- Aug 7:** Excursion to Hudson, WI, for Great Northern Historical Society.
- Aug 19:** Excursion to Mankato & St Peter via C&NW one-way only; bus return.

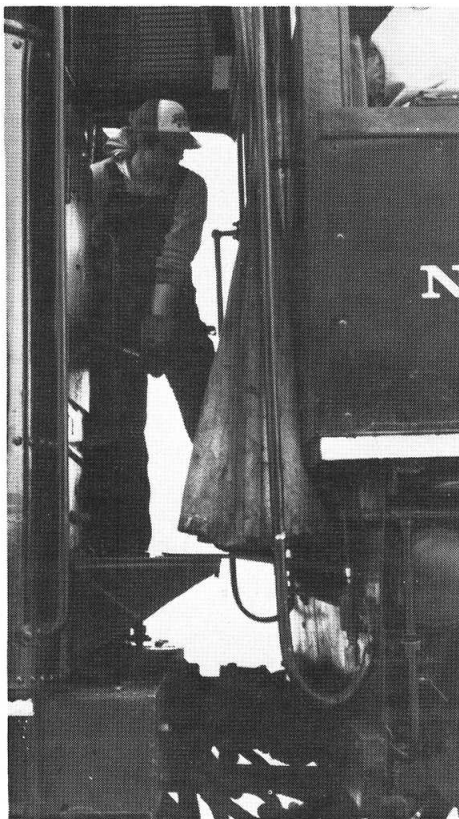
- Sept 7-8:** Renaissance Festival excursion.
- Sept 20-22:** Stillwater excursions. Outbound trip open to public.
- Sept 24:** General Membership meeting, Jackson Street Roundhouse, St Paul. Bring lawn chair.
- Sept 28-29:** Excursions on MTM's Stillwater line. Return trip to St Paul open to public.
- Oct 12:** Fall color excursion to Hudson.
- Nov 26:** Annual membership meeting and election of officers for 1986, National Guard Auditorium, Fort Snelling.

"400" Returns August 10

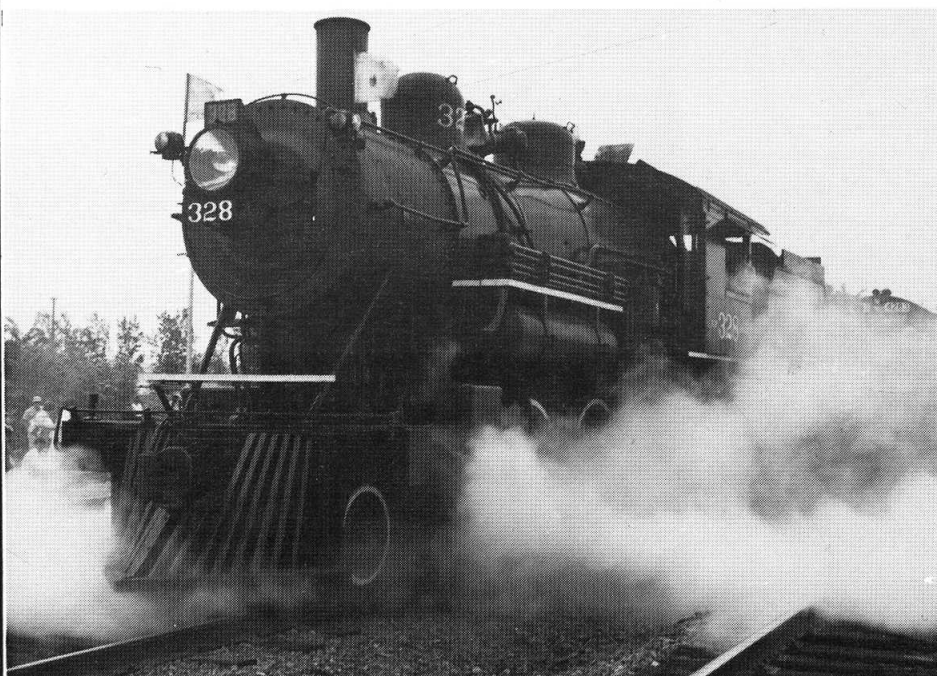
Streamline Excursions, Inc., a new venture, and the Chicago & North Western Transportation Company will operate a public excursion train from St Paul to Eau Claire, WI, and return on August 10. The train will commemorate the 50th Anniversary of C&NW's famous "400", and will be the first public passenger train over the route since July 23, 1963, when the "400" was discontinued.

A pair of North Western's famous "Presidential F7's" will power the train. First class, parlor and coach seating will be offered, and photo run-bys are planned. Snacks will be served, and box lunches will be offered with advance reservations.

Fares are \$49.00 for coach, \$60.00 for parlor, and \$75.00 for first class. Box lunches will cost \$5.00. Checks payable to Streamline Excursions Inc. with stamped self-addressed envelope should be mailed to Streamline Excursions Inc., 1334 Coach Road, Apt 325, St Paul, MN, 55108.



Fireman Ward Gilkerson works on getting the rhythm and aim needed to keep 328 hot. Bob Ball Photo.



Museum's former NP 328 eases around the wye at Hudson, WI, on C&NW iron during May 11 National Transportation Week excursion. Rod Kriesel Photo.

John Jensen Retires

Mr **John Jensen** retired on June 1, 1985, as Vice President & General Manager of the **Minnesota Transfer Railway**. The Museum presented John with a framed print of the Larry Fisher painting "Steam On Stone" with thanks for his years of help to MTM.

In the early years, the Transfer stored Car No 1300 in its roundhouse, and permitted the first public operation of the car under Museum auspices over its tracks. More recently, the Transfer has allowed MTM to store tools, equipment and rolling stock, and to conduct restoration work on railroad property. They have allowed us to operate our trains over their lines at no charge beyond pilot crews.

John Jensen and his railroad have been a friend in need and in deed. **Bernie Braun** presented John with a lifetime pass for all Museum operations. All who know John wish him health and happiness in retirement.



ERM Book Is A Good Buy

As of June, the Museum has 530 copies of "The Electric Railways Of Minnesota" by **Russell L Olson**, from a printing of 3,000 copies. The book retails today for \$29.95, which is the present selling price of new traction books half the size of ERM.

At the special membership price of \$23.80 post-paid and including sales tax, this book should be in the hands of every MTM member for reference and for future value when the existing stock is gone. The Museum has recovered its printing costs from previous sales, making new sale revenues available for MTM's restoration projects.

If you are an MTM member and are interested in a "good buy," send me your check for \$23.80, payable to Minnesota Transportation Museum, Inc. You will be glad you did.

George K Isaacs
682 West Sextant Avenue
St Paul, MN, 55113

Board Of Directors

The MTM Board Of Directors approved the following items at its meeting of June 18, 1985:

1. Accepted the resignation of **Patria Champion** as Museum Secretary. The position will be filled at the next Board meeting.
2. Appointed **Ken Snyder** as building manager for the Jackson Street Roundhouse.
3. Leased Rock Island Coach No 2604 to Chicago & North Western Transportation Company for excursion service at Chadron, NE.
4. Leased part of Jackson Street Roundhouse to Minnesota Utility Contracting, Inc./Tele-A-Cable Communications for one year.
5. Authorized **Gene Corbey** to negotiate with Robert F Ackmann for sale of a portion of Museum right of way at Stillwater, with action to be taken at next Board meeting.

6. Directed the **Minnegazette** to publish a Museum policy that ALL contacts with the media should be cleared through the Vice President for Public Relation.

7. Directed **Gene Corbey**, **Russ Olson** and **Ken Snyder** to investigate purchase of a 1976 International truck from Carpenter Steel, and report to the next Board meeting.

8. Authorized **Art Pew** to obtain a corporate seal for the Museum.

9. Directed the By-Laws Committee to consider the continuity of the Long Range Planning Committee.

10. Authorized purchase of The Milwaukee Road depot building at Bayport, Mn, which must be removed from the railroad's property within 60 days.

Ray Bensen Jr
Acting Secretary

Let's Get It Right

The Board Of Directors requests all Museum members to clear information with the Vice President for Public Relations before passing it on to the media. In several recent incidents, the press has published erroneous information passed on by well-intentioned Museum members.

The Museum's plans and arrangements often change on short notice, and members sometimes do not get the word. Reporters work under deadlines, sometimes deciding to print information they receive without checking it. The result is that the public can be misinformed, and hard feelings can result.

Unless you are specifically authorized to release information to the media, please refer the reporter's questions to the proper Museum officer.



Proof that you can parallel park a streetcar. When Twin City Lines light-weight car No 2004 was brand-new in June, 1926, the Company put her on curb-side public display at an unknown downtown location. The couple in the Hupmobile seem unruffled.

Photo Courtesy of Minnesota Historical Society.

Traction Notes

The Como-Harriet Streetcar Line began weekend operations May 18, and daily operations on Memorial Day Weekend. Both cars operated Memorial Day, carrying a whopping 1,242 passengers who turned out in perfect weather.

Charter activity began May 12 with the National Transportation Week observance, and the May 18 Linden Hills Days celebration. **Carol McCarthy** is managing charter scheduling this year, and business is brisk. The new telephone number for charters now is 645-0874. If you forget this number, call the old one and listen to the recording.

A huge amount of work was completed prior to the 1985 season. The new car-barn was finished and wired, new security fencing was installed, Car 78 and its truck were brought to the site, and new control gear was installed in the maintenance barn for overhead electrification. The interior renovation of Car 1300 was completed last winter. Over the past several winters, all the woodwork from whistle handle to back-up box has been refinished. Both sets of doors were rebuilt.

The right of way has been groomed, and improvements made to the outstanding 42nd Street gardens. Operator training procedures were refined further this year, and new operators have been assigned to the schedule.



In 1953, PCC car No 425 approaches the Linden Hills Bridge on the Harriet right of way, enroute to Brookside Avenue, Edina. Location now is the site of MTM's car barns. Later that year, car was sold to Mexico City. Charles A Brown Photo.

Both cars, 1300 and 265, operated on the Memorial Day and July 4th holidays, and carried good passenger loads. Several members participated in two-car operations for the first time.

The hardworking regulars and semi-regulars at the streetcar line deserve a round of thanks. Their unselfish efforts have created one of the finest historic streetcar operations in North America. Though small in size compared to other trolley museums, ours has a quality and professionalism that is second to none.

Safety and training has been given renewed emphasis this year, reflecting direction by the Board of Directors. **Mike Buck** expanded the written, classroom and on-board instruction programs developed in prior years. All operators from past years have been recertified for current operating procedures. This program will continue in the future, since it has been shown that even the most diligent members occasionally and inadvertently overlook details.

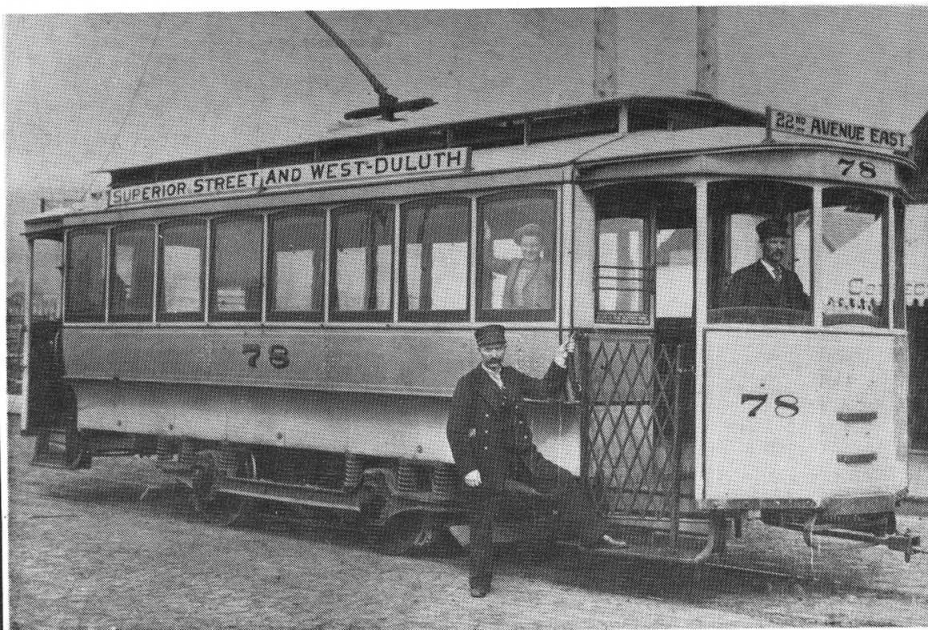
If you have not visited the streetcar line recently, please come out for a look. Regular work sessions are held every Wednesday evening and most Saturday mornings.

TRAIN Convention November 8-10

The Pacific Locomotive Association will host the 1985 **Tourist Railway Association Convention** at San Francisco, November 8, 9, and 10. Seminars will cover grant writing, leasing and acquisition, site development, advertising and public relations, gift shops, trolley operations, and other topics still being planned.

Information is available from the organizers, or from MTM Board members. The convention is an excellent opportunity to learn, see other museums, and trade information. Registrations should be mailed before September 1 to:

Peter Schultz
Convention Chairman, TRAIN '85
Pacific Locomotive Association
P O Box 2465
San Leandro, CA 94577



MTM's very own Car No. 78, in service on the Duluth Street Railway before 1895. From Jim Kreuzberger Collection.

Membership And Mailing Report

Paid membership as of June 14 was 729, with 94 former 1984 members still not renewed. I expect several of them to renew prior to September's Membership Directory Supplement.

Current Membership Totals

	Total	Metro Area
Family	240	220
Active	276	247
Associate	212	142
Corporate	1	1
Total	729	610

During the past few years, mailings of **Minnegazette** and stuffers have been done at my home. Formerly, this was done by Hersey Mailing Service. A crew assembles to gather the contents of each envelope and to affix the mailing label. **Bill Cordes** prepares the labels, which can be varied to suite our needs. The following morning, I arrange a total of 825 pieces, including about 90 complementary mailings, to meet Post Office requirements. The mailing is then on its way.

At present, 46 members have paid a premium for 1st Class mailing, and these are pulled, stamps affixed and dropped in a separate Post Office box. Frequently during the summer, excursion trip mailings are done during the day by three to four members in a fold, staple and rubber stamp session. The Membership Directory also is received "loose" from the printer, and assembled by volunteers.

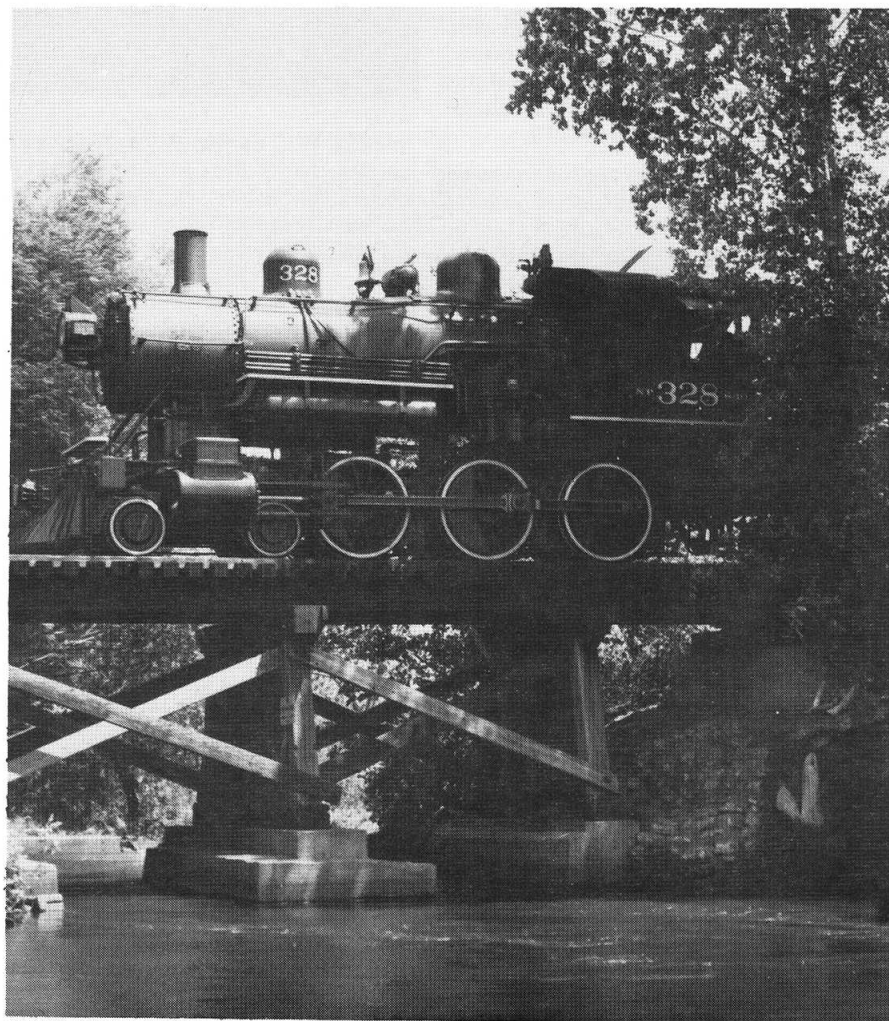
Metro area zip codes are mailed by the Minneapolis Main Post Office. Others are handled at the Eagan Bulk Mailing Center, where as much as two weeks is consumed for nation-wide distribution.

The following members have experience and are available for mailing crews as needed: **Larry Beyer, Mike Buck, Anna & Bob Butler, Bill Cordes, Harold Dalland, Phil Epstein, Jack & Ione Gordon, Roy Harvey, Scott Heiderich, Sharon Huikko, Ted Kane, Mike Miller, Lanie Paymar, Fred Rhodes and Terry Warner.** Many thanks to all including the Post Office for their help.

Raymond R Bensen Sr
Membership Secretary



Jeff Haviland, Tom Dethmers, Bernie Braun and Ward Gilkerson at Stockyard Days. Bill Graham Photo.

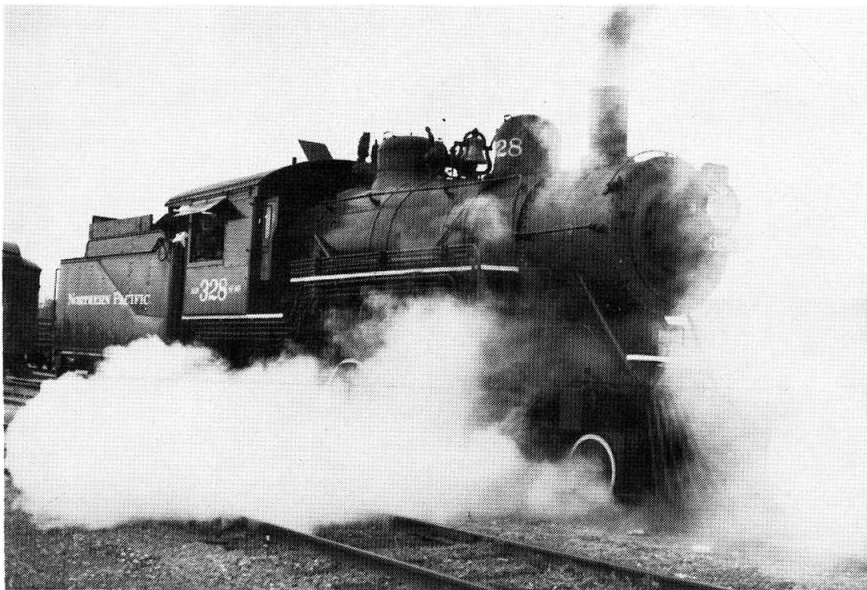


Scene at Rice Creek, June 22. Bill Graham Photo.

Railroad Report



Stockyard Special heads north through New Brighton June 22. Bob Ball Photo.



NP 328 makes up train for New Brighton Stockyard Days on June 9. Bob Ball Photo.

June 22-23 was our fifth appearance at New Brighton's annual Stockyard Days festival. A big thank-you to the **City Of New Brighton** and the **New Brighton Jaycees**. Thanks also to the **Minnesota Transfer** for letting us run this year only with pilot crews, and without one of their engines as back up power. The **Chicago & North Western** also allows us to operate on their mainline without back up power, and we appreciate their confidence in us.

The turn out at Stockyard Days was about the same as last year. **Zeke Fields** found a broken rail in the stockyard area on our last run Saturday night, which the Minnesota Transfer promptly fixed, thus not delaying our schedule. We provided a four-mile round trip lasting about 45 minutes. This schedule was convenient for us, and our riders appeared quite satisfied.

We have some good trips planned for the rest of this season. **Dave Fritz** is having difficulty finding enough help to staff the trains. If you can help, please call Dave.

Our open house at Jackson Street Roundhouse was held June 15. It brought out a good crowd to see the building and grounds. This roundhouse will become the home of MTM, a place to work on equipment and for the public to see our collection.

We have had some excellent and well-attended training sessions. I am pleased at the improvements we have made in our training program, and it has improved members' performance.

Many thanks to the good people at the Chicago & North Western and the Minnesota Transfer Railway, who have made it possible for us to carry on our railroad activities so far this season. And thanks to all our members who have worked on the equipment and on operating crews. We are shaking out the bugs and running quality operations.

Bernie Braun
Vice President/Railroad



Some Doing Brings 328 Back

Summer is here, and NP 328 is hot again. Last February, during the first thunderstorm of the year, a soaked group of people moved 328 into a heated stall at the Minnesota Transfer Roundhouse for repairs. The work continued almost without let up until the May 4 deadline, when the engine was needed for service.

Due to the late start, Wednesday night and Saturday work sessions became almost every night work sessions. Some new faces joined the regulars, and with cooperation, 328 was again made a reliable machine.

The front of the engine was raised and the pilot truck rolled out for repairs. The frame was squared up with the world. A cracked journal box was welded and machined. Pedestals were ground and pedestal liners were fitted to them.

Both tender trucks also were pulled out and dismantled. The arch-bar side frames were formed back to their intended shape. The lower bars were replaced with new stock.

Leaky boiler tubes were cleaned, welded and re-rolled in the firebox. Leaky stay bolts were bobbed. The smoke box was sanded and recoated. From the running boards to the wheels, 328 was cleaned by hand and repainted. The draw bar between engine and tender was removed, built back up to its original dimensions, and new pins were machined for both ends. All new wash out plugs were cast, machined and installed. Even the bell was polished.

Then on the afternoon of May 4, when everything was going smoothly, it happened. At 3:15 p.m., while torquing down the steam dome cover after lapping the throttle, the last of 16 bolts broke off on the final sequence of

torquing. Seven hours later, the dome cover was torqued down again with one new bolt, and the final hydrostatic test applied to the boiler. The water was pumped down to working level, and 328 got a ride on the turntable.

At 3:30 a.m. on May 5, we lighted her first fire of the year. At 8:45 a.m., only one hour 45 minutes behind schedule, she made a trip to Twin Cities Arsenal to retrieve the coaches for the first revenue run the following weekend. 328 was running again!

Most sincere thanks to the Minnesota Transfer Railway for providing space for this work, and for making our operations possible. And thanks, too, to everyone who stayed up late to secure services and materials, and to get the work finished.

Zeke Fields

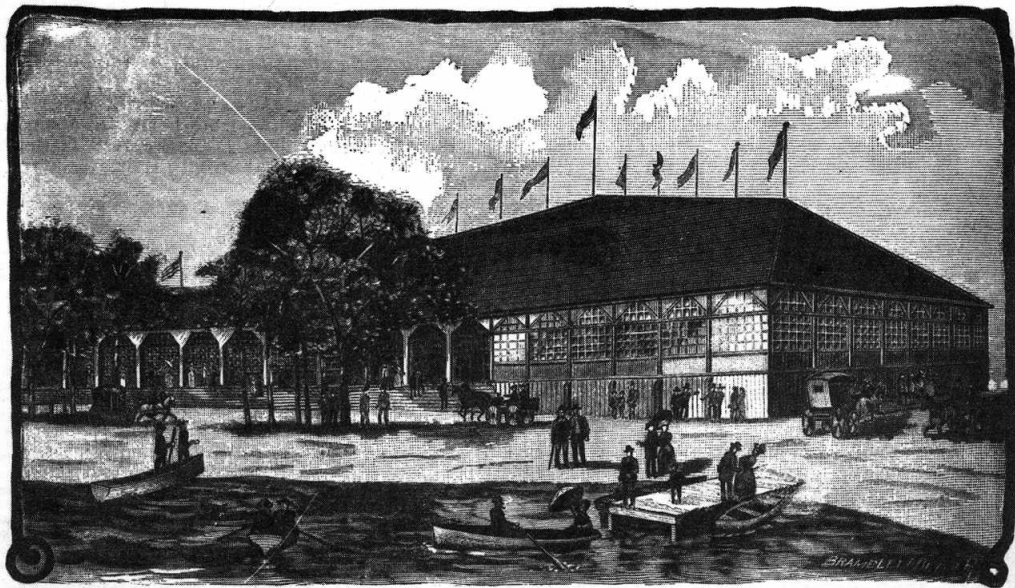


Hibbard Studios captured this glassplate view of the Lake Harriet Pavillion in July, 1905. Buggies assemble as couples boat, and rain threatens the evening's rooftop dance and band concert. Tom Lowry's yellow cars stop to the right of the picture, where they still stop today. Photo Courtesy of Minnesota Historical Society.

Minneapolis, Lyndale and Minnetonka Railway Company.

LAKE HARRIET PAVILION.

SEASON OF 1889.



Light Opera ^{presented} Every Evening

BY A COMPANY OF FIRST-CLASS ARTISTS.

A Most Charming Resort to Spend Your Holidays and Evenings

Good Music, Choice Refreshments, Fishing and Boating.

PICNIC PARTIES WILL RECEIVE SPECIAL ATTENTION.

Large and Pleasant Grounds.

Trains Leave cor. First Avenue South and Washington
every twenty minutes.

HOURLY TRAINS ARE ALSO RUN TO MINNEHAHA FALLS AND WASHBURN PARK.

Stillwater & St Paul Seems Longer

It's an impressive railroad. Sweeping out of downtown Stillwater, our line swoops over Highway 95 and assaults a twisting, nearly two percent grade out of the St Croix Valley. Though not as long, The Hill seems like St Paul Pass in the Bitterroots, particularly when our Engine 328 is performing the assault. From Oak Glen at the top of the hill, our line plunges into the forest, in the direction of the setting sun.

After each work session, our crews say a short prayer of thanks that the line stops short of Puget Sound, actually only about six miles from its starting point in a paddock known as Duluth Junction. It is as much railroad as we can manage for the present time with the forces available. Normal maintenance is what the line needs, and has had not much of for about a decade.

A little arithmetic describes the problem. Ties spaced more or less 22 inches apart total about 2,800 ties in one mile. In the easterly 3.5 miles of line, perhaps 25 percent of the ties have seen better days, and some have disappeared altogether. That comes to around 2,500 ties needing immediate help.

Just as in days gone by, MTM replaces ties by unspiking them, digging them out and removing them by hand. We then insert a replacement tie from the stock donated by **Honeywell, Inc.**, spike it, and tamp it up with shovels, a routine known as "gandi-dancing." The old ties are loaded onto the work flat and hauled to a pile that rapidly disappears to local landscapers. Each replacement tie weighs around 100 pounds.

An energetic crew, working in cool weather, can replace 15 to 20 ties in one work session with present equipment. Optimistically, if 400 ties were replaced in one work season, it would take over six years to replace just the ties that are bad today. Of course, a number of ties fail each year, and so it will take some doing to get ahead of the problem.

During the 1984 work season, we congratulated ourselves on replacing 130 ties all year. That was before **Orville Richter** took over as track foreman. Orville is a man of incalculable energy.



90 pound ribbon rail and new ties donated by Webster Wood Products of Wayzata replace well-worn 85 pound stock. Orville Richter (third from right) takes a breather.



McKusick Road crossing is excavated to be filled with new limestone ballast.

Photos by Bill Campion.



The Minnesota Railfans Association sponsored a Doodlebug excursion from Minneapolis to Stillwater in April, 1962, over what was to become MTM's own line. Car No B-18 pauses at White Bear Lake depot before entering the Stillwater branch. Bill Graham Photo.



NP doodlebug B-18 leaving White Bear Lake yard limit bound for Stillwater. This portion of the line now is abandoned. Bill Graham Photo.

As of June, 1985, Orville's crews have equalled last year's seasonal total, and show no signs of letting up, despite the tropical Minnesota weather.

First thing this spring, **Bill Campion** arranged with the **Washington County Highway Department** and **Twin City Track, Inc.**, to relay the Manning Avenue and McKusick Road crossings. Both now have rock ballast, 90 pound ribbon rail, new ties donated by **Webster Wood Products**, and new asphalt. Bill's arrangements spared MTM most of the expense.

Next, Orville replaced a fractured rail and some ties at Stone Bridge, before starting to rebuild a reverse curve about halfway up The Hill.

The location is on a fill about sixty feet above a trout pool in Brown's Creek. A limestone arch culvert, probably predating Henry Villard's leadership of the Northern Pacific, passes under the fill, that is a summer hide out for local youths. On the other side of the creek, a limestone cliff rises, framed in basswood and oak trees.

The fill has settled slightly. track alignment was bad, over 50 ties were gone or going, and rock ballast was needed to keep the ties dry. In about six weeks, our crews have finished this heroic job, and for a short distance now our line really does look like The Milwaukee Road's climb over St Paul Pass.

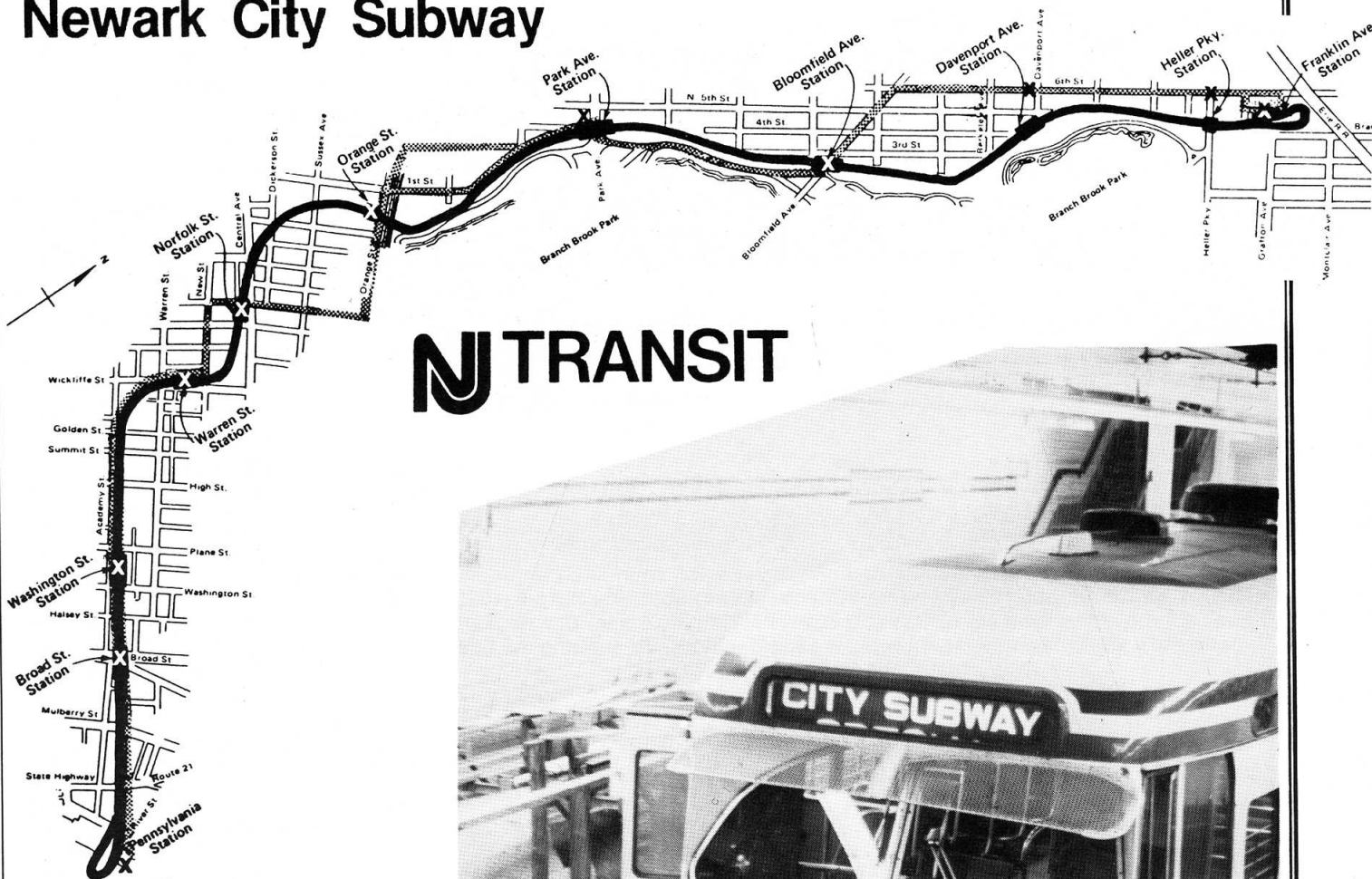
Normal maintenance still is the real problem. That means replacing a few failed ties at locations spread out along the line, servicing rail joints, clearing culverts, and tamping up isolated low spots.

This will require more equipment than we now have, for inserting and tamping ties. That suggests the need for a small building to store equipment and tools. It also will require a large and willing crew of volunteers. The work may sound like an exhausting bore, but it really is fun. The reward is the sight of a railroad in good condition, and the knowledge that it will not need fixing for at least a decade.

Please contact **Tom Dethmers** or **Orville Richter** if you can help. Crews will be working throughout the summer and fall on our line, so there is room for all applicants.

Tom Dethmers
Stillwater Site Chairman

Newark City Subway



Newark Loves Twin City Trolleys

Duncan Moffitt

During the dismemberment of the **Twin City Rapid Transit Company** system in 1953, the company divided and sold its fleet of 141 PCC cars. Transit operators in Mexico City bought 91 cars; Shaker Heights, OH, bought 20, and the Public Service Transport Company (PSCT) of Newark, NJ, bought 30 cars. I first rode the Newark City Subway nearly 20 years ago, (*Minnegazette*, September/October 1984), and had the pleasure of



Former Twin City Lines No 325, now NJT No 6, prepares to leave Penn Station in Newark City Subway in 1984. Photos by Duncan Moffitt.

revisiting it last year. I'm pleased to report that all is well with the City Subway. Track, stations and electrification were overhauled in 1984. The cars are in such good shape that they will be running into the 1990's. Figures conflict as to how many of the cars remain in service. At least two were sold to Shaker Heights in 1977. As many as four, which had provided spare parts, were destroyed in a tunnel collapse sometime in the 1970's.

The Newark City Subway recently celebrated its 50th anniversary. It began in the 1920's, when acute trolley congestion on downtown streets gave rise to the idea of building a subway in an old canal bed. Thomas McCarter Jr., a lawyer and community leader, is credited with the idea.

The City of Newark did the work, beginning just three weeks after the 1929 stock market crash. To create jobs, the City abandoned earth moving equipment, and put 5,000 Newarkers to work with picks and shovels. The subway opened on May 26, 1935, and has run ever since, strikes and catastrophic weather notwithstanding.

Newark had operated a large fleet of unique diesel-electric city buses since the 1920's. They operated as trolleys on city routes, with their diesel engines shut off. The diesels, however,

could carry the buses beyond electrified territory, and allowed them to deadhead to and from garages without having to follow the wires. The dual system made the buses quite heavy, and also required specialized maintenance. However, by 1938, only three streetcar lines remained active, and PSCT rapidly converted operations to its hybrid buses.

The company proposed in 1947 that the City of Newark, which owned the subway, should pave it to permit trolley bus operation. General Motors even provided a new design prototype bus equipped with diesel engine and trolley poles. The City refused to pave the subway, however, and by 1952, only today's streetcar operation remained of what once had been an extensive system. After eliminating the surface car lines, PSCT found that riders preferred to transfer from brand-new buses to the subway cars for the ride downtown.

In 1952, with the City still adamantly refusing to pave the subway, PSCT opted to buy new trolley cars and to keep the subway running as it was. It rejected a fleet of Brill cars for sale in Atlantic City, and this is where the Twin City Rapid Transit Company enters the story. In 1953, the PSCT bought thirty cars from Twin City Lines for \$10,000 each, a bargain even at that time.

On January 17, 1954, five months and two days before the last run of the Como-Harriet Line in Minneapolis, former Twin City Lines car No. 360, now PSCT No. 21, became the first PCC in subway revenue service. By the following March, all of the old cars had been retired, and PCC's had taken over. At that point, the City Subway assumed the basic form that continues to the present.

Of course, most people assumed that the trolleys were doomed sooner or later. In the 1960's, employees muttered how "they" would surely pave the subway. As usual, neither the company nor the City would pay for the paving, and so the PCC's clattered on. By this time, too, the company was eliminating its hybrid diesel/trolley buses in favor of the pure diesels. These would have required gas masks for employees and riders in the subway, and indirectly, the diesel buses may have helped save the PCC's.

The PSCT was succeeded by a new company, Transport of New Jersey, in the 1970's. The most noticeable change to the City Subway was the repainting of the cars from grey and white to Bicentennial white with red and blue accent striping. Schneider and Carlson, authors of the book PCC FROM COAST TO COAST, report that two cars, Numbers 3 and 27, formerly TCL numbers 322 and 416, were sold to the Shaker Heights Rapid Transit, retaining their PSCT numbers. They also report that numbers 8 and 29 (TCL No. 327 and 418) also were sold to Shaker Heights in 1978. These cars have the distinction of having run on three of the four systems ever to use Twin Cities PCC cars. The authors do not report on the loss of cars in the tunnel collapse.

By the late 1970's, it was apparent that City Subway needed expensive renovation. While federal transit funds were available at that time, they could not be spent on a privately owned operation. The New Jersey DOT was beginning to consolidate the menagerie of public and private transit operations in the state, most of which were delapidated, into a single state-wide system of commuter services focused on Philadelphia and New York City. The new organization was named New Jersey Transit, which arranged to take over the Newark City Subway in order to qualify for federal funding.

Since the PCC cars were in excellent condition and no danger of collapse,



View from rear of in-bound Newark Subway car at Norfolk Street during station rehabilitation, 1984. Van is parked on one of the ramps that once carried branch lines from city streets into the subway.

NJT decided in 1982 to use the federal money for track and station rehabilitation. By 1984, the work was in full swing. When I visited the system last year, one car had been overhauled and repainted from Bicentennial colors to a version of NJT standard livery being applied to buses and trains system-wide.

Since arriving in Newark, the PCC's have almost uniformly carried the destination sign "City Subway," although occasionally the sign "Special" is used. Since there are only two loops, one at either end of the line, all cars run the entire route, making destination signs a moot point. The cars carry side destination signs just in front of what are now the exit doors, a reminder of Twin City Lines two-man operations.

The route is about one-third underground, with the rest on surface right of way. The underground portion is from Pennsylvania Station to just beyond Warren Street. The only grade crossing is at Orange Street, where the trolley stops are on the far sides of the intersection in both directions. A common traffic signal protects the crossing. The railroad in the open cut beneath Orange Street is the old Delaware, Lackawanna & Western electric line, now NJT Rail, whose ancient electric trains were retired last year after 53 years of service. From Orange Street outward, the City Subway runs along the edge of Branch Brook Park to the right of neighborhoods. All of the stations are at underpasses. At Franklin Avenue, the cars round the loop and stop facing inbound at the only platform. At Pennsylvania Station, cars lay over on the arrival track, and then round the loop, pausing on the departure track to load.

The surface stations are not exactly architectural wonders. They are simple and functional. The underground stations, on the other hand, have tile walls with inlaid murals depicting the depression-era construction, and inlaid lettering for the station names. These tiles were all carefully repaired and preserved during the renovation.

If you are visiting New York City, you will find that a two to three hour side trip to the Newark City Subway is easy and inexpensive. Both Amtrak and NJT operate frequently from New York's Pennsylvania Station to Newark's Pennsylvania Station. Non-stop running time is about 15 minutes, and the one-way fare is \$1.50. Amtrak has



Two cars, former Twin City Lines No 320 in foreground, lay over on Penn Station arrival track before rounding loop for out-bound runs.

no round-trip discount, but NJT sells a \$2.25 round-trip during off-peak hours. Port Authority Trans-Hudson (PATH) trains also operate to Newark from beneath the intersection of 33rd Street and 6th Avenue, a block or two east of Penn Station. Another PATH line runs from beneath the World Trade Center in lower Manhattan. PATH trains make many stops en-route, and you may have to change trains. Pocket maps and schedules are available from token vendors, and maps are posted in most stations and on trains. It is good exploration for intrepid traction buffs!

By Amtrak, NJT or PATH, you will arrive on the upper station level in Newark. Waiting rooms, concession stands and ticket offices are at street level, and the City Subway is underground. Newark's Penn Station is a busy, big city railroad station, not at all dangerous or scary during daylight hours, and surprisingly not too terribly filthy. The upper level train platforms are good for train watching. The street and City Subway levels are something of a labyrinth.

The City Subway fare is 75 cents. I have found that it is run by uncommonly nice people who take pride in

their work and welcome people who come from out of town to ride their well-kept PCC's. Take your camera and a pocket full of quarters, and perhaps some MTM postcards to give to an especially nice employee. Spend an hour or two riding and taking pictures, and savor it!

The following books make interesting reading about Twin City Lines PCC cars, and provided some of the information for this article:

PCC FROM COAST TO COAST, Fred W Schneider III and Stephen P Carlson. Interurban Press, 1983.

THE ELECTRIC RAILWAYS OF MINNESOTA, Russell L Olson. Minnesota Transportation Museum Inc., 1976.



"400" Anniversary

The Chicago & North Western's "400" train would be 50 years old this year. The train has been chronicled in **Jim Scribbins'** excellent book **THE 400 STORY**, and in publications of the North Western Historical Society. The first "400," actually trains No 400 and 401, operated between the Twin Cities and Chicago, 400 miles in 400 minutes, an average scheduled speed of just over 60 mph including intermediate stops.

In 1934, the Chicago, Burlington & Quincy unveiled a sleek, stainless steel, diesel-powered train for the Twin Cities market. The Milwaukee Road responded with a steam-powered, conventional but nonetheless stylish train it called "Hiawatha." In short order, the Chicago & North Western mustered its "400", using conventional but refurbished equipment. Although less stylish, "400" matched the competition in speed and quality of service. The first trains ran on January 2, 1935, and attracted good loadings.

In late 1938, North Western's bankruptcy judge approved expenditures for new diesel locomotives and light-

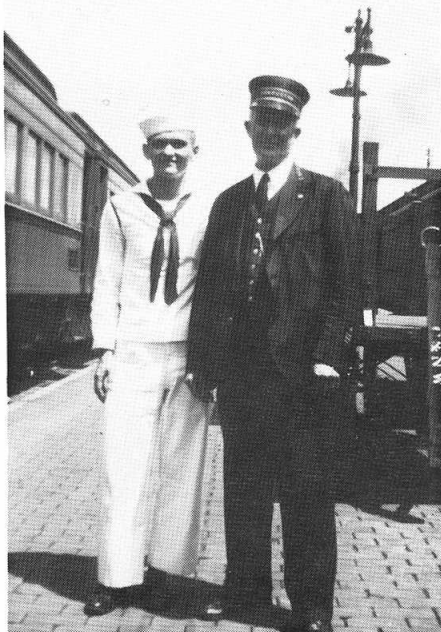


Chicago & North Western's initial "400" equipment departs North Western Station in Chicago, in early publicity pose.

weight streamlined coaches for the "400." By this time, the competing "Hiawatha" was into its third set of streamlined equipment, and Burlington's "Zephyr" into its second. New equipment was needed for North Western to compete. It entered service September 24, 1939, and was judged a great success.

A recollection of **Bob Ball Sr.**, father of MTM's **Bob Ball**, tells something about the "400's" clientel. He worked part-time as a North Western diner chef, and observe that "400" passengers returned their plates to the kitchen with half-eaten portions of food on them. On the Omaha trains, by contrast, plates came back to the kitchens absolutely bare, wiped clean with bread crusts. Those folks took a more serious view of food than the stylish set who rode the "400."

From a single pair of Twin Cities trains, "400" became a passenger service trademark, which North Western introduced system wide. As more new equipment arrived from Pullman Standard and Electro-Motive, other "400" streamliners entered operation, serving a number of points in northern Wisconsin and Upper Michigan, Iowa, and southern Minnesota.



A youthful **Bill Marshall** stands with C&NW conductor **Phil Parish** in 1945 at Madison, WI, passenger station.

Photo from Bill Marshall Collection.

A lesser known "400" served southern Minnesota and South Dakota, at one point providing sleeping car service from Winona, Rochester and Mankato, to Huron, Pierre, and Rapid City, South Dakota. Both Minnesota "400's" were withdrawn from service in the summer of 1963, victims of highway and air competition.



"400" had but months to live as conductor backs the streamliner into St Paul Union Depot in March, 1963. **Bill Graham** Photo.

Recollections Of The "400"

Bill Marshall

I passed the book of rules exam, the telegrapher exam, and hired out on the C & NW Wisconsin Division on September 8, 1941, a few days after my 18th birthday. My timetable contained the following bold face note:

ALL TRAINS CLEAR THE SCHEDULE OF Nos. 400 AND 401 FIFTEEN MINUTES.

This made it abundantly clear that employees were NOT to cause any delay to the "400's".

My next encounter was as a rookie operator at Lake Bluff interlocking tower. Lake Bluff and Tower KO were the north and south ends of the 2.2 mile double track cross-over between the freight mainline from Proviso to Milwaukee, and the passenger main from Chicago to Milwaukee. I had to turn on the pedestrian warning bell at the depot, 500 feet from the tower, to warn passengers crossing between the two platforms.

When most trains hit the bell at Lake Bluff, it required several minutes for them to reach the passenger station. Not so for No. 401. It required watching very closely for the head end of the E-3 locomotives, No 5001 or 5006, since the rest of the train was obscured in a cloud of dust.

During the Thanksgiving season, North Western ran Advance 400's. They consisted of a 2900-class heavy Pacific engine and a pre-streamliner consist, carrying white flags, and running 15 minutes ahead of its scheduled companion. I understand some passengers were disappointed to be ushered to the Advance 400, but the equipment and schedule were just as good as the yellow streamliner.

Twelve 2900-class E-2 steam locomotives of the Pacific type (4-6-2) were specially rebuilt to handle the pre-diesel "400." I had a chance to ride the cab of No. 2908 one evening when it developed a hot journal box at Harvard, IL, and had to surrender the first section of the Duluth-Superior Limited to an R-1 Class Ten Wheeler engine.

I encountered the "Capital 400" as a student at the University of Wisconsin at Madison. It ran as Train No 155 from Chicago to Milwaukee, then as Train No 609 from Milwaukee to Madison, and finally as Train No 500 for the final leg back to Chicago via Janesville and Beloit.

The engineer on the Madison-Chicago leg once told me he had a paper route. At Milwaukee, the conductor gave him all the newspapers abandoned in the

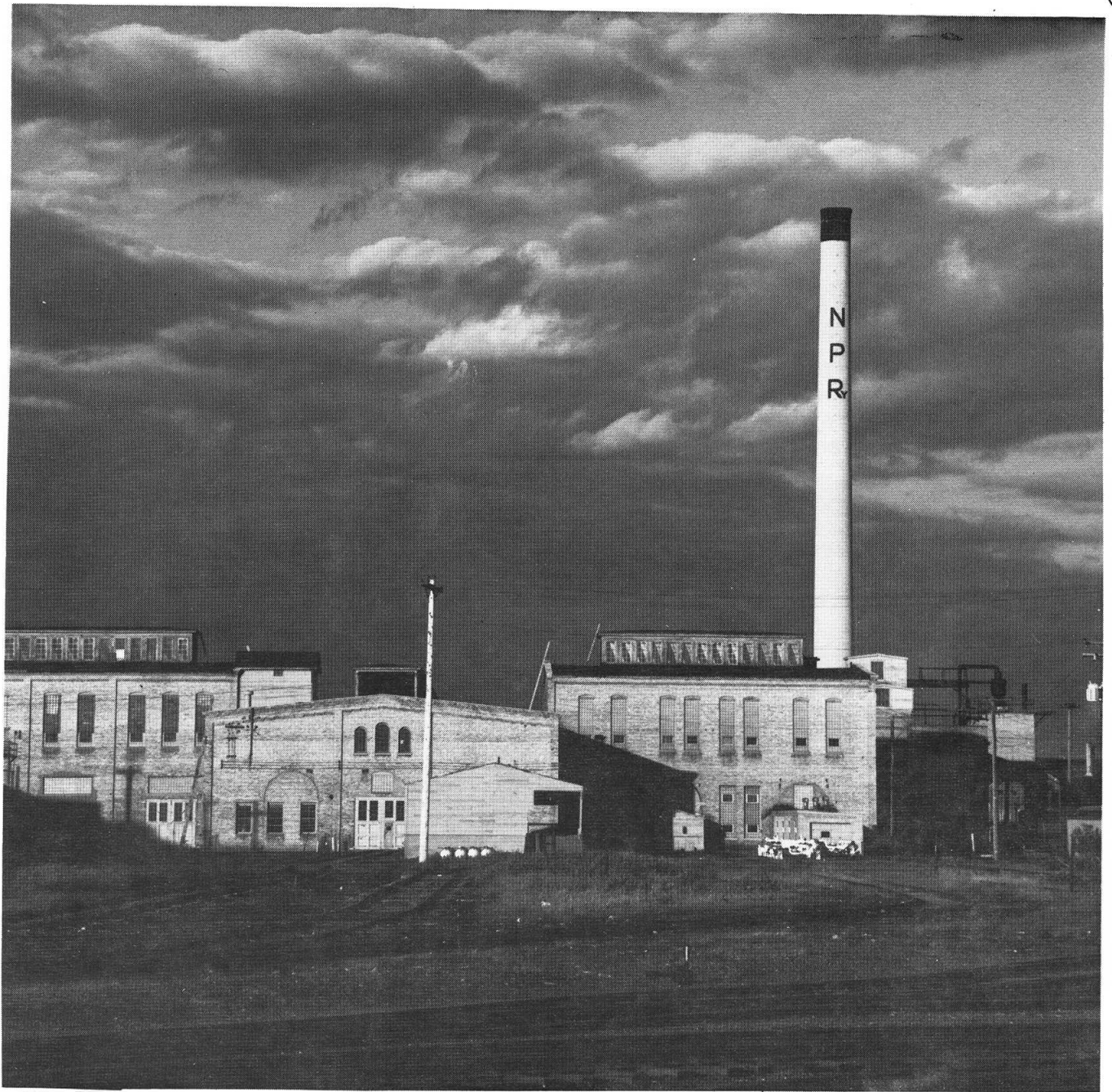
coaches. He rolled them up, tied them, and then threw them off to selected customers - no charge, of course. He included a bag of candy to one youthful customer, only to be met the next day by six youthful customers.

My last encounter with the "400" was the Sunday after Thanksgiving, 1953. Jean and I took the "Dakota 400" from the family home in Janesville, WI, to Wyeville, where we were to transfer to No. 401 to the Twin Cities via Eau Claire. At Wyeville, a freight conductor rushed into the telegraph office to report that 13 freight cars had derailed, requiring No 401 to detour via La Crosse. I asked him what caused the derailment. He replied, "I have no idea. Parts of the freight cars are still falling out of the sky!"

We waited quite some time for a C&NW pilot to guide the Milwaukee Road crew over the Wyeville to Winona leg. At Sparta, chartered buses were to take passengers for Eau Claire. Since the buses were late and it was cold outside, the transferring passengers waited on board the train, which also waited. At Winona, we waited for a Burlington train, and then traveled up to Minneapolis over the Burlington, arriving at 11:30 p.m.



The "Capital 400" pauses in Janesville, WI, in 1947, with one of the 1939 Electro-Motive E-3 units and a heavy-weight diner in its streamlined consist. Bill Marshall Photo.



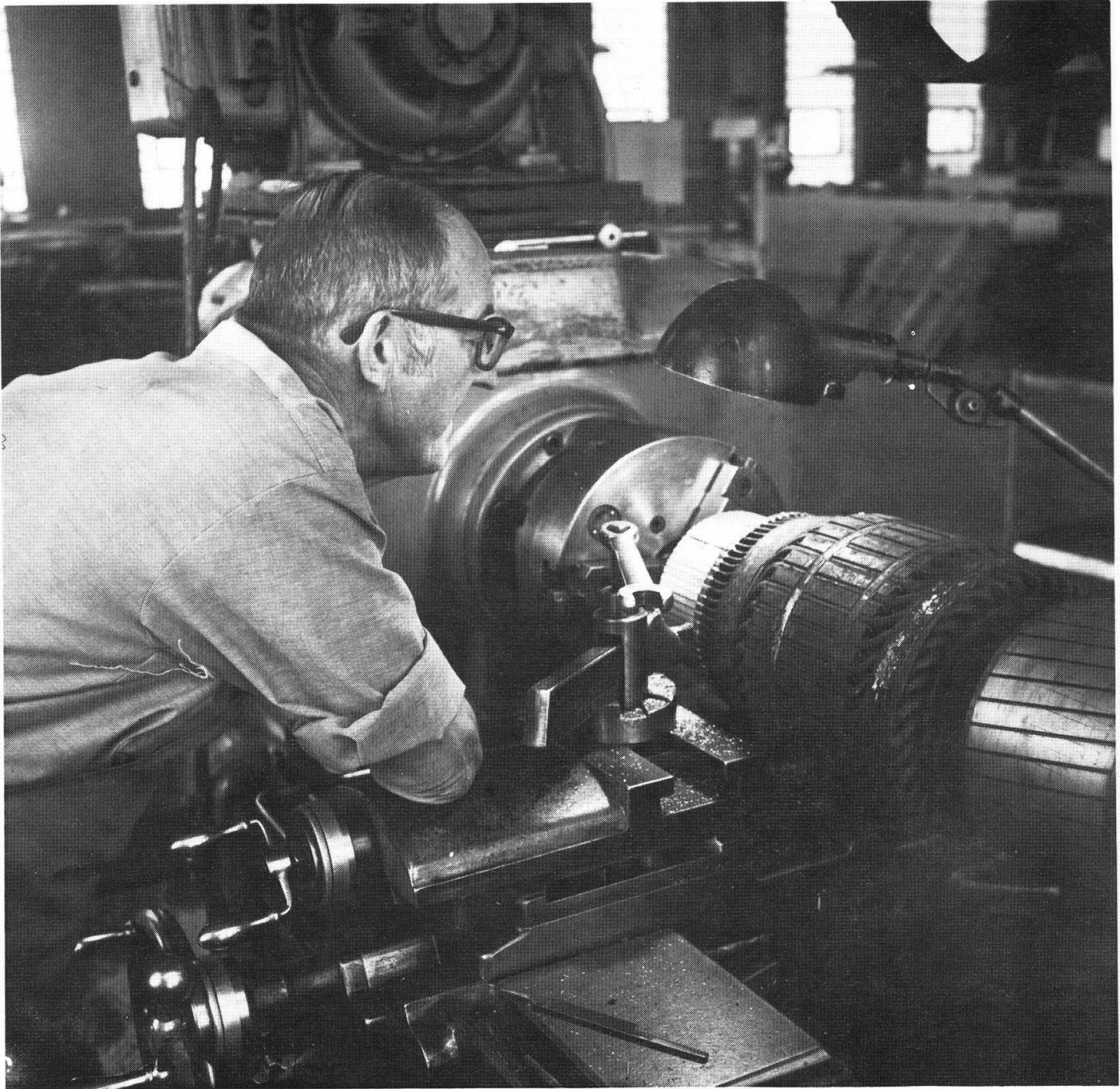
The "NPRy" smokestack dominates the wheel and truck shop at sunset.

An Artist's Sampler

From a distance, the Como Shops in St Paul looked like a decaying railroad shop complex. It was the Northern Pacific's main coach repair facility, built just south of Como Park in the 1880's. If a coach was broken, decrepid, or merely in need of a touch-up, Como could fix it. A blacksmith shop made castings, while a truck and machine shop could repair or make almost any part on a coach. Wheels could be trued or replaced. Upholsterers, silversmiths, carpenters, cabinet makers and painters turned their skills to diners and parlors, sleepers and palace cars, as well as to lowly day coaches, baggage and post office cars. Whatever went in felt the touch of master craftsmen, and came out looking like new.

Several hundred men and women from St Paul and surrounding communities came to work at Como every day. In their spare time, they counseled Boy Scout troops, marched in parades, sang at community gatherings, and occasionally made it known that they worked in the best darned coach shop west of Boston.

From bustling activity in the 1950's, work slowly fell off. In the 1960's, the house tracks were lined with antiques dating from the 19th Century, awaiting sale or scrapping. One such piece was a wooden sleeper observation car complete with stained glass windows, wicker chairs, oriental rugs, and exotic brasswork. Another was a two-car gas-electric motor train just retired from a North Dakota branchline. All intact and priceless, and all headed for oblivion.



A machinist applies a lathe to the commutator of an electric dynamo.

Como was where MTM got its start in railroad preservation. In one of its vacant buildings, the new owner, Burlington Northern, allowed us to assemble our collection. Triple Combine 1102 was rescued from Como's scrap line and restored. Engines 328 and Dan Patch 100 were torn apart and rebuilt there. So were Streetcar 265, a caboose and several other coaches. From this, we put together the essentials of our excursion train, and taught ourselves how to fix it and make it run, in the finest tradition of Como Shops.

A century old, Como was sold to become the part of Energy Park known as Bandana Square. As the Museum and the railroad's shop forces prepared to move out, photographer **Joe Elliott** of Allentown, PA, captured Como in its essence. **Aaron Isaacs** arranged for us to share some of Joe's work.



Amtrak dome lounge built for Southern Pacific prepares to ride the transfer table. All Photos By Joe Elliott.



Published bi-monthly for members in good standing of the Minnesota Transportation Museum, Inc.

Articles and photos of museum interest are always welcome and will be returned upon request.

Please address all communications to the editor,

Bill Graham, Minnegazette
5818 Knox Avenue South
Minneapolis, MN 55419

About The Back Cover.

We are at Nicollet and Washington Avenues in Minneapolis in 1896, looking north toward Hennepin Avenue. The Nicollet House with the Northern Pacific Railway ticket office is on the left. A E Johnson's Steamship Agency caters to immigration from the old country, while, in the background, the Davy Electric Belt & Truss Company serves the working man. The paving crew's steam roller entertains the folks in the great coats, as a Twin City Lines single-trucker bobs along toward the Chicago, Milwaukee & St Paul Depot. Traffic copes with the center poles in the street. Another single-trucker accelerates west on Hennepin Avenue, toward Kenwood or Lake Harriet.



Photo Courtesy of Minnesota Historical Society.

MTM Membership Application

The all-volunteer nonprofit Minnesota Transportation Museum was formed in 1962 for the purpose of finding, restoring and operating vintage rail equipment for the education and the enjoyment of the public as a reminder of days gone by. If you like what what you see in this magazine, how about becoming a member and helping us? It is a rich experience filled with fun and tradition. Join us today!

- ☐ MTM FAMILY membership (\$20 per year). All members over 18 eligible to operate museum equipment.
- ☐ MTM ACTIVE membership (\$15 per year). Eligible to operate museum equipment.
- ☐ MTM ASSOCIATE membership (\$10 per year).

All members receive the bi-monthly **Minnegazette** magazines at their homes.

- ☐ I do not wish to join MTM, but would like to contribute to the restoration (tax deductible).

Name _____ Phone _____

Address _____

City _____ State & Zip _____

Mail to: **Minnesota Transportation Museum, Inc.**

P.O. Box 1300, Hopkins, MN 55343



MINNESOTA STREETCAR MUSEUM

PO Box 16509
Minneapolis, MN 55416-0509
www.TrolleyRide.org

August 2021

Pursuant to board action at the August 5, 2021 meeting of the board of directors and in honor of the 50th anniversary of operation of the Como-Harriet Streetcar Line the attached materials are being republished by the Minnesota Streetcar Museum under the under the Creative Commons "Attribution-ShareAlike 4.0 International" and "Attribution-ShareAlike 3.0 Unported" licenses. You may choose either license as suited for your needs. In particular, the 3.0 license is meant to be compatible with the Wikipedia project.

In general, these licenses will allow you to freely:

- **Share** — copy and redistribute the material in any medium or format
- **Adapt** — remix, transform, and build upon the material for any purpose, even commercially.

Under the following terms:

- **Attribution** — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
 - **Please credit the *Minnesota Streetcar Museum* and provide our URL www.trolleyride.org** We would also appreciate hearing about your re-use of our materials though that is not a requirement of the license.
- **ShareAlike** — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.
- **No additional restrictions** — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.

Please review these licenses at the Creative Commons site for full legal code and details on allowed uses:

- Creative Commons Attribution-ShareAlike 4.0 International:
 - <https://creativecommons.org/licenses/by-sa/4.0/legalcode>
- Creative Commons Attribution-ShareAlike 3.0 Unported
 - <https://creativecommons.org/licenses/by-sa/3.0/legalcode>

If these licenses are not appropriate for your needs, for example you want to use the material commercially without crediting us or do not want to share your contributions under the same license please reach out to us for other options.

We Make Minnesota's Electric Railway History Come Alive!